Environmental Soundness Work Group Meeting

Summary of Findings from the January 8, 2004 meeting on SeaKleen

Meeting participants agreed that SeaKleen is a promising biocide for ballast treatment. The potential for environmental damage appears low and data indicates that SeaKleen degrades relatively fast, and is toxic at low concentrations to a wide variety of organisms.

Further laboratory and on-board testing is needed to better address the following research questions. Double blind testing was recommended.

- What are the effects of temperature, salinity, ph, light, and organic material on the SeaKleen degradation curve?
- How much is SeaKleen diluted upon discharge?
- What concentration of SeaKleen can be safely discharged, and how can we verify this concentration prior to discharge?
- What is the lowest concentration of SeaKleen that will effectively kill organisms in our region, and does this differ from other regions?
- How does SeaKleen effect organisms in the sediment?
- Does the presence of mud removers affect SeaKleen?
- How can SeaKleen be dosed into the vessels ballast tank to insure proper mixing and concentration?

members recommended that onboard testing be carried out in the spring when plankton concentrations will be higher. Testing should occur on a voyage from San Francisco to Puget Sound to evaluate the effectiveness of SeaKleen on high-risk ballast. Dilution studies, using dye, should be conducted prior to on-board testing to assist in evaluating a safe discharge concentration for SeaKleen treated ballast. Methods to determine the toxicity of the SeaKleen treated ballast should be clearly described in the research methods. The on-board trial should discharge the SeaKleen treated ballast into the Strait of Juan de Fuca and not in port to further reduce risk.

The University of Washington, in collaboration with the University of Maryland and Glosten and Associates, will produce a research plan for review by the committee members and others. Washington Department of Fish and Wildlife, in collaboration with Washington Department of Ecology and the Coast Guard, will review the research plan for possible approval.

The SeaKleen on-board research will not be conducted until the review and approval process is completed.